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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,877	02/09/2006		John Edward Hill	20912103855	2388
28886	7590	11/13/2006		EXAMINER	
CLARK HI		JENNIE SLUTE 350	EVANS, GEOFFREY S		
500 WOODWARD AVENUE, SUITE 3500 DETROIT, MI 48226			U	ART UNIT	PAPER NUMBER
·				1725	

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

			/ _
	Application No.	Applicant(s)	
	10/567,877	HILL, JOHN ED	WARD
Office Action Summary	Examiner	Art Unit	
	Geoffrey S. Evans	1725	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence a	ddress
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period way for reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this D (35 U.S.C. § 133).	
Status			•
Responsive to communication(s) filed on      This action is FINAL. 2b)⊠ This      Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro		e merits is
Disposition of Claims			
4) Claim(s) 1-3 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 1-3 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or			
9) The specification is objected to by the Examine	r.		
10) The drawing(s) filed on is/are: a) acce		Examiner.	
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correct	_,,		• •
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form F	TO-152.
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati ity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this Nationa	ıl Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 20060313.	4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal F 6)  Other:	ate	

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## **DETAILED ACTION**

1. Claim 1 is objected to because there is no proper antecedent basis for "the at least one embossment".

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Takasago et al. in Japan Patent document No. 2001-162,387. Takasago et al. discloses providing coated sheets of metal (see paragraph 6), punching at least one embossment on at least one coated metal sheet, the embossment comprising a depression having a raised peripheral edge (element 15, see figure 2) and applying a laser beam (element 20), wherein the gases produced during the forming of the weld escape via the at least one embossment.
- 4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Gu in WO 99/08829, published February 1999. Gu discloses welding two coated sheets of metal (10,12), creating a raised region (a protuberance) on one of the coated sheets, and applying a laser beam forming a laser weld wherein gases produced during the forming of the laser weld escape via the at least one embossment.
- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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- 6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gu in WO 99/08829 in view of Dell Piane et al. in U.S. Patent No. 4,682,002 and McCane et al. in U.S. Patent No. 6,592,947 or Ishii et al. in Japan Patent No. 4-4,145. Gu does not disclose applying fine particles on a sheet but instead uses a laser beam to create "protuberances". Dell Piane et al. teach that the only way of obtaining a "clean" weld between two metal sheets protected by using low vaporizing temperature materials is to provide between the metal sheets, in any way possible, a passage enabling the weld area to communicate externally, where "externally" is intended to mean any space enabling safe expansion of the said vaporizing gas (see column 4, lines 47-53). McCane et al. teach coating with zinc particles a galvanized sheet of metal to create an uneven surface. Alternatively Ishii et al. teach coating with zinc particles to create voids between two plated stainless steel sheets. It would have been obvious to adapt Gu in view of Dell Piane et al. and McCane et al. or Ishii et al. to apply zinc particles to the surface instead of using the laser beam by the method disclosed in Gu so that less energy is needed to create the voids between the two sheets.
- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Saito et al. in Japan Patent No. 60-255,294 discloses creating a projection (element 16, see figures 2 and 4) to allow the gases to escape during welding.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey S Evans whose telephone number is (571)-272-1174. The examiner has a flexible schedule but is generally available during morning hours in the Eastern Time zone.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571)-272-1292. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

**GSE** 

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